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[\[book\] CLUTO-A Clustering Toolkit](#)

G Karypis, MINNESOTA UNIV MINNEAPOLIS DEPT OF ... - 2002 - [stinet.dtic.mil](#)

... is maximized and the inter-cluster **similarity** is minimized ... and proteins that have **similar** functionality, grouping ... CLUTO is a **software** package for clustering low ...

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We describe the design and implementation of a program called sim to measure similarity between two C computer programs. It is useful for detecting plagiarism among a large set of homework programs. This software is part of a project to construct tools to assist the teaching of computer science.

↑ REFERENCES



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- 1 A. AIKEN, Measure of software similarity. URL <http://www.cs.berkeley.edu/~aiken/moss.html>.
- 2 [Brenda S. Baker, Parameterized pattern matching: algorithms and applications, Journal of Computer and System Sciences, v.52 n.1, p.28-42, Feb. 1996](#)

[doi>[10.1006/jcss.1996.0003](https://doi.org/10.1006/jcss.1996.0003)]

- 3  M. Blum , S. Kanna, Designing programs that check their work, Proceedings of the twenty-first annual ACM symposium on Theory of computing, p.86-97, May 14-17, 1989, Seattle, Washington, United States [doi>[10.1145/73007.73015](https://doi.org/10.1145/73007.73015)]
- 4 László Babai , Shlomo Moran, Arthur-Merlin games: a randomized proof system, and a hierarchy of complexity class, Journal of Computer and System Sciences, v.36 n.2, p.254-276, April 1988 [doi>[10.1016/0022-0000\(88\)90028-1](https://doi.org/10.1016/0022-0000(88)90028-1)]
- 5 S. Goldwasser , S. Micali , C. Rackoff, The knowledge complexity of interactive proof systems, SIAM Journal on Computing, v.18 n.1, p.186-208, Feb. 1989 [doi>[10.1137/0218012](https://doi.org/10.1137/0218012)]
- 6 X. HUANG, R. C. HARDISON, AND W. MILLER, A space-efficient algorithm for local similarities, *Computer Applications in the Biosciences*, 6 (1990), pp. 373-381.
- 7  D. S. Hirschberg, A linear space algorithm for computing maximal common subsequences, Communications of the ACM, v.18 n.6, p.341-343, June 1975 [doi>[10.1145/360825.360861](https://doi.org/10.1145/360825.360861)]
- 8 J. W. HUNT AND M. D. MCILLROY, An algorithm for differential file comparison, Tech. Report 41, Bell Laboratories, June 1976.
- 9  James W. Hunt , Thomas G. Szymanski, A fast algorithm for computing longest common subsequences, Communications of the ACM, v.20 n.5, p.350-353, May 1977 [doi>[10.1145/359581.359603](https://doi.org/10.1145/359581.359603)]
- 10 H. T. Jankowitz, Detecting plagiarism in student Pascal programs, The Computer Journal, v.31 n.1, p.1-8, Feb., 1988 [doi>[10.1093/comjnl/31.1.1](https://doi.org/10.1093/comjnl/31.1.1)]
- 11 L. MALMI, M. HENRICHSON, T. KARRAS, J. SAARHELO, AND S. SAERKILAHTI, Detecting plagiarism in Pascal and C programs, tech. report, Helsinki University of Technology, 1992.
- 12 E. W. MYERS AND W. MILLER, Optimal alignments in linear space, *Computer Applications in the Biosciences*, 4 (1988), pp. 11-17.
- 13 S. B. NEEDLEMAN AND C. D. WUNSCH, A general method applicable to the search for similarities in the amino acid sequence of two proteins, *Journal of Molecular Biology*, 48 (1970), pp. 443-453.
- 14 T. F. SMITH AND M. S. WATERMAN, Identification of common molecular subsequences, *Journal of Molecular Biology*, 147 (1981), pp. 195-197.
- 15  L. G. Valiant, A theory of the learnable, Proceedings of the sixteenth annual ACM symposium on Theory of computing, p.436-445, December 1984 [doi>[10.1145/800057.808710](https://doi.org/10.1145/800057.808710)]

↑ CITED BY 10

- Shauna D. Stephens, Using metrics to detect plagiarism (student paper), Journal of Computing Sciences in Colleges, v.16 n.3, p.191-196, March 2001
-  Andreas Zeller, Making students read and review code, ACM SIGCSE Bulletin, v.32 n.3, p.89-92, Sept. 2000
-  Stina Bridgeman , Michael T. Goodrich , Stephen G. Kobourov , Roberto Tamassia, SAIL: a system for generating, archiving, and retrieving specialized assignments using LATEX, ACM SIGCSE Bulletin, v.32 n.1, p.300-304, Mar. 2000

Edward L. Jones, Metrics based plagiarism monitoring, Journal of Computing Sciences in Colleges, v.16 n.4, p.253-261, 2001

Edward L. Jones, Plagiarism monitoring and detection - towards an open discussion, Journal of Computing Sciences in Colleges, v.16 n.3, p.229-236, March 2001

Christian Arwin , S. M. M. Tahaghoghi, Plagiarism detection across programming languages, Proceedings of the 29th Australasian Computer Science Conference, p.277-286, January 16-19, 2006, Hobart, Australia



Sub Ramakrishnan , Emeka Nwosu, DBMS course: web based database administration tool and class projects, ACM SIGCSE Bulletin, v.35 n.1, January 2003

Paul D. Wiedemeier, Preventing plagiarism in computer literacy courses, Journal of Computing Sciences in Colleges, v.17 n.4, p.154-163, March 2002

Maxim Mozgovoy, Desktop tools for offline plagiarism detection in computer programs, Informatics in education, v.5 n.1, p.97-112, January 2006

↑ INDEX TERMS

Primary Classification:

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↑ ABSTRACT

We present a new approach to reducing the manual labor required to estimate software reliability. It combines the ideas of *partition testing* methods with those of *stratified sampling* to reduce the sample size necessary to estimate reliability with a given degree of precision. Program executions are stratified by using automatic *cluster analysis* to group those with *similar features*. We describe the conditions under which stratification is effective for estimating software reliability, and we present preliminary experimental results suggesting that our approach may work well in practice.

↑ REFERENCES




Note: OCR errors may be found in this Reference List extracted from the full text article. ACM has opted to expose the complete List rather than only correct and linked references.

Ande73 [Anderberg, M. R. Cluster Analysts for Applications, Academic Press, New York, 1973.](#)



Bent87 [Jon Bentley, Programming pearls: profilers, Communications of the ACM, v.30 n.7, p.587-592, July 1987. \[doi>\[10.1145/28569.315737\]\(http://doi.acm.org/10.1145/28569.315737\)\]](#)

Bind88 [Binder, D. A. and Hidirolou, M. A. Sampling in time. In Handbook of Statistics 6: Sampling, P. R. Krishnaiah and C. R. Rao editors, North Holland, Amsterdam, 1988.](#)

-  Brow75 J. R. Brown , M. Lipow, Testing for software reliability, Proceedings of the international conference on Reliable software, p.518-527, April 21-23, 1975, Los Angeles, California [doi>10.1145/390016.808475]
-  Butl91 Ricky W. Butler , George B. Finelli, The infeasibility of experimental quantification of life-critical software reliability, Proceedings of the conference on Software for critical systems, p.66-76, December 04-06, 1991, New Orleans, Louisiana, United States [doi>10.1145/125083.123054]
- Chat84 Chatfield, C. The Analysts of Tzme Series: An Introduction, Chapman and Hall, London, 1984.
- Cho87 Cho, C. Quality Programming, Wiley, New York, 1987.
- Coch77 Cochran, W. G. Sampling Techniques, Wiley, New York, 1977.
- Curr86 P A Currit , M Dyer , H D Mills, Certifying the reliability of software, IEEE Transactions on Software Engineering, v.12 n.1, p.3-11, Jan. 1986
- DeMi79 DeMillo, R. A., Sayward, F. G., and Lipton, R. J. Program mutation: a new approach to program testing. Infotech International State of the Art Report: Program Testing, Infotech International, 1979.
- Dura80 Duran, J. W. and Wiorkowski, J. J. Quantifying software validity by sampling. IEEE Transactions on Reliability, Vol. R-29, No. 2 (June 1980), pp. 141-144.
- Dura84 Duran, J. W. and Ntafos, S. C. An evaluation of random testing. IEEE Transactions on Software Engineering, Vol. SE-10, No. 4 (July 1984), pp. 438-444.
- Goel85 Goel, A. L. Software reliability models: assumptions, limitations, applicability. IEEE Transactions on Software Engineering, Vol. SE-11, No. 12 (December 1985), pp. 1411-1423.
- Haml90 Dick Hamlet , Ross Taylor, Partition Testing Does Not Inspire Confidence (Program Testing), IEEE Transactions on Software Engineering, v.16 n.12, p.1402-1411, December 1990 [doi>10.1109/32.62448.]
- Howd75 Howden, W. E. Methodology for the generation of program test data. IEEE Transactions on Computers, Vol. C-24, No. 5 (May 1975), pp. 554-559.
- Kauf90 Kaufman, L. and Rousseeuw, P. J. Finding Groups in Data, Wiley New York, 1990.
- Knut81 Donald E. Knuth, The art of computer programming, volume 2 (3rd ed.): seminumerical algorithms, Addison-Wesley Longman Publishing Co., Inc., Boston, MA, 1997
- Litt90 Littlewood, B. Modelling growth in software reliability. In Software Reliability Handbook, P. Rook editor, Elsevier, New York, 1990, pp. 137-154.
- Litt92 Littlewood, B. and Strigini, L. The risks of software. Scientific American (November 1992), pp. 62-75.
-  McGe92 Catherine McGeoch, Analyzing algorithms by simulation: variance reduction techniques and simulation speedups, ACM Computing Surveys (CSUR), v.24 n.2, p.195-212, June 1992 [doi>10.1145/130844.130853]
- Mill92 Keith W. Miller , Larry J. Morell , Robert E. Noonan , Stephen K. Park , David M. Nicol , Branson W. Murrill , Jeffrey M. Voas, Estimating the Probability of Failure When Testing Reveals No Failures, IEEE Transactions on Software Engineering, v.18 n.1, p.33-43, January 1992 [doi>10.1109/32.120314]

- Musa87 John D. Musa , Anthony Iannino , Kazuhira Okumoto, Software reliability: measurement, prediction, application, McGraw-Hill, Inc., New York, NY, 1987
- Musa93 John D. Musa, Operational Profiles in Software-Reliability Engineering, IEEE Software, v.10 n.2, p.14-32, March 1993 [doi>10.1109/52.199724]
- Nels78 Nelson, E. N. Estimating software reliability from test data. *Mticroelectronws and Reliability*, Vol. 17 (1978), pp. 67-74.
- Nels87 Nelson, B. L. A perspective on variance reduction in dynamic simulation experiments. *Communications on Statistical Simulation*, Vol. 16, No. 2 (1987), pp. 385- 426.
- Neym34 Neyman, J. On two different aspects of the representative method: the method of stratified sampling and the method of purposive selection. *Journal of the Royal Statistical Socaety*, Vol. 97, pp. 558-606.
- Podg92 Podgurski, A. The role of statistical reliability assessment. *Proceedings of the 25th Symposium on the Interface: Computing Science and Statistics (College Station, Texas, March 1992).*
- Rapp85 Sandra Rapps , Elaine J. Weyuker, Selecting software test data using data flow information, IEEE Transactions on Software Engineering, v.11 n.4, p.367-375, April 1985 [doi>10.1109/TSE.1985.232226]
- Rich81 Debra J. Richardson , Lori A. Clarke, A partition analysis method to increase program reliability, Proceedings of the 5th international conference on Software engineering, p.244-253, March 09-12, 1981, San Diego, California, United States
- Sarn92 Sarndal, C.-E., Swensson, B., and Wretman, J. *Model Assisted Survey Sampling*, Springer-Verlag, New York, 1992.
- Schi78 Schick, G. J. and Wolverton, R. W. An analysis of competing software reliability models. *IEEE Transactions on Software Engineering*, Vol. SE-4, No. 2 (March 1978), pp. 104-120.
- Sukh84 Sukhatme, P. V., Sukhatme, B. V., Sukhatme, S., and Asok, C. *Sampling Theory of Surveys With Applications*, third edition, Iowa State University Press, 1984.
- Thay76 Thayer, T. A., Lipow, M., and Nelson, E. C. *Software Reliabdity*, TRW technical report TRW-SS-76-03, March 1976.
- Tsou91 Tsoukalas, M. Z., Duran, J. W., and Ntafos, S. C. On some reliability estimation problems in random and partition testing. *Proceedings of the International Symposium on Software Reliability Engineering (Austin, Texas, May 1991)*, IEEE Computer Society Press, Los Alamitos, CA, pp. 194-201.
- Weis86 S. N. Weiss and E. J. Weyuker, "A generalized domain-based definition of software reliability y," *Proceedings of the Workshop on Software Testing (Banff, Alberta, July 1986)* IEEE Computer Society Press, Los Alamitos, CA, pp. 98-107.
- Weyu91 Elaine J. Weyuker , Bingchiang Jeng, Analyzing Partition Testing Strategies, IEEE Transactions on Software Engineering, v.17 n.7, p.703-711, July 1991 [doi>10.1109/32.83906]

↑ CITED BY 5



David Leon , Andy Podgurski , Lee J. White, Multivariate visualization in observation-based testing, Proceedings of the 22nd international conference on Software engineering, p.116-125, June 04-11, 2000, Limerick, Ireland

William Dickinson , David Leon , Andy Podgurski, Finding failures by cluster analysis of execution profiles, Proceedings of the 23rd International Conference on Software Engineering, p.339-348, May 12-19, 2001, Toronto, Ontario, Canada



Andy Podgurski , Wassim Masri , Yolanda McCleese , Francis G. Wolff , Charles Yang, Estimation of software reliability by stratified sampling, ACM Transactions on Software Engineering and Methodology (TOSEM), v.8 n.3, p.263-283, July 1999

Simeon C. Ntafos, On Comparisons of Random, Partition, and Proportional Partition Testing, IEEE Transactions on Software Engineering, v.27 n.10, p.949-960, October 2001

Brian Mitchell , Steven J. Zeil, A reliability model combining representative and directed testing, Proceedings of the 18th international conference on Software engineering, p.506-514, March 25-29, 1996, Berlin, Germany

↑ INDEX TERMS

Primary Classification:

D. Software



D.2 SOFTWARE ENGINEERING



D.2.4 Software/Program Verification



Subjects: Reliability

General Terms:

Design, Experimentation, Measurement, Performance, Reliability, Theory

↑ Collaborative Colleagues:

Andy Podgurski:	Scott A. Ameduri	Yoonhwan Kim	Debra J. Richardson
	Vinay Augustine	David Leon	Rosanne Rohana
	Pravir Chandra	Wassim Masri	John Steven
	Lori Clarke	Wassim A. Masri	Jiayang Sun
	Lori A. Clarke	Wes Masri	Bin Wang
	William Dickinson	Yolanda McCleese	Elaine J. Weyuker
	William David Dickinson	Melinda Minch	Lee J. White
	Bob Fleck	Nagi Nahas	Francis G. Wolff
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S10	3594118	(determin\$3 or identify\$3 or locat\$3) near3 (similar\$3 near3 (code or section or interval or phase)) and "time varying behavior" analytical "finding similar sections" "plurality of intervals" ((track or tracking) adj statistic) ((identify or compar\$4) near2 behavior) (similar\$3 near2 interval) averag\$3 variance maximum scor\$3 benchmark\$3 sampl\$3 (length near2 time)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/13 17:24
S11	5289102	717/???ccls. and (determin\$3 or identify\$3 or locat\$3) near3 (similar\$3 near3 (code or section or interval or phase or cluster)) and (classify\$3 or partition\$3) near3 (code or section or interval or phase or cluster) and "time varying behavior" analytical "finding similar sections" "plurality of intervals" ((track or tracking) adj statistic) ((identify or compar\$4) near2 behavior) (similar\$3 near2 interval) averag\$3 variance maximum scor\$3 benchmark\$3 sampl\$3 (length near2 time) metric frequency\$2 "analysis points" "basic block" profil\$3 simulat\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/13 17:28
S12	5289102	714/???ccls. and (determin\$3 or identify\$3 or locat\$3) near3 (similar\$3 near3 (code or section or interval or phase or cluster)) and (classify\$3 or partition\$3) near3 (code or section or interval or phase or cluster) and "time varying behavior" analytical "finding similar sections" "plurality of intervals" ((track or tracking) adj statistic) ((identify or compar\$4) near2 behavior) (similar\$3 near2 interval) averag\$3 variance maximum scor\$3 benchmark\$3 sampl\$3 (length near2 time) metric frequency\$2 "analysis points" "basic block" profil\$3 simulat\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/13 17:29

EAST Search History

S13	731	(run\$4 or execut\$3) near3 (program or code or interval or segment or portion or section or cluster) and (profil\$3 or tracking or track or trace or tracing or record\$3) near3 (metric or statistic or behavior) and (determin\$5 or calculat\$3 or analyz\$3) near3 (similarity or similar or differenc\$3 or closest or "most likely")	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/13 17:35
S14	29	(run\$4 or execut\$3) near3 (program or code or interval or segment or portion or section or cluster) and (profil\$3 or tracking or track or trace or tracing or record\$3) near3 (metric or statistic or behavior) and (determin\$5 or calculat\$3 or analyz\$3) near3 (similarity or similar or differenc\$3 or closest or "most likely") and (identify\$3 near3 behavior)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/13 17:34
S15	41	(run\$4 or execut\$3) near3 (program or code or interval or segment or portion or section or cluster) and (profil\$3 or tracking or track or trace or tracing or record\$3) near3 (metric or statistic or behavior) and (determin\$5 or calculat\$3 or analyz\$3) near3 (similarity or similar or differenc\$3 or closest or "most likely") and (compar\$4 near3 behavior)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/13 17:35
S16	67	717/???ccls. and (run\$4 or execut\$3) near3 (program or code or interval or segment or portion or section or cluster) and (profil\$3 or tracking or track or trace or tracing or record\$3) near3 (metric or statistic or behavior) and (determin\$5 or calculat\$3 or analyz\$3) near3 (similarity or similar or differenc\$3 or closest or "most likely")	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/13 17:35

EAST Search History

S17	13	714/???.ccls. and (run\$4 or execut\$3) near3 (program or code or interval or segment or portion or section or cluster) and (profil\$3 or tracking or track or trace or tracing or record\$3) near3 (metric or statistic or behavior) and (determin\$5 or calculat\$3 or analyz\$3) near3 (similarity or similar or differenc\$3 or closest or "most likely")	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/13 17:35
S18	129	"analysis points" same similar\$3	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/13 17:54
S19	1	S13 and S18	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/13 17:36
S20	1	(determin\$3 or identify\$3 or locat\$3) near5 "analysis points" same similar\$3 and (execut\$3 or run\$4 or simulat\$3 or emulat\$3) near5 (code or section or interval or phase or portion)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/13 17:40
S21	42	(determin\$3 or identify\$3 or locat\$3) same "analysis points" and similar\$3 and (execut\$3 or run\$4 or simulat\$3 or emulat\$3) near5 (code or section or interval or phase or portion)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/13 17:49
S22	128	S18 not S21	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/13 17:49
S23	5306	identif\$7 near5 (similar\$3 near3 (region or section or portion or segment or interval or code or partition or cluster))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/13 17:56
S24	13	717/???.ccls. and identif\$7 near5 (similar\$3 near3 (region or section or portion or segment or interval or code or partition or cluster))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/13 17:56

EAST Search History

S25	13	714/???cccls. and identif\$7 near5 (similar\$3 near3 (region or section or portion or segment or interval or code or partition or cluster))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/13 17:57
S26	26	S24 or S25	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/13 18:00
S27	3180	similarity.ti.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/13 18:01
S28	24	S23 and S27	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/13 18:01
S29	24	S28 not S26	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/13 18:01
S30	17	("4853851" "5132972" "5291497" "5335342" "5408642" "5423027" "5440723" "5522036").PN. OR ("5699507"). URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/07/13 18:06
S31	9	("5440742").PN. OR ("5574837"). URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/07/13 18:12
S32	28	("4319221" "4326101" "4467437" "4484348" "4528688" "4530110" "4559604" "4624011" "4651289" "4716593" "4723290" "4731845" "4745562" "4752957" "4773099" "4783806" "4876731" "4893255" "4897811").PN. OR ("5440742").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/07/13 18:16
S33	35	("4319221").URPN.	USPAT	OR	OFF	2006/07/13 18:27
S34	34	S33 not S31 not S30	USPAT	OR	OFF	2006/07/13 18:27
S35	32	S33 not S31 not S30 not S32	USPAT	OR	OFF	2006/07/13 18:27

EAST Search History

S36	0	"identifying similarities in code segments".ti.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/17 10:35
S37	75	(identifying and similarities).ti.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/17 10:35
S38	1	(identifying and similarities).ti. and lucent.as.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/17 14:36
S39	346	(code or instruction) near3 similarit\$3 and (compress\$3 or condens\$3 or minimal or minimiz\$5)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/17 14:38
S40	179	(code or instruction) near3 similarit\$3 and phase	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/17 14:38
S41	1	(code or instruction) near3 similarit\$3 and phase near3 (signature or name or ID)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/17 14:38
S42	11	(code or instruction) near3 similarit\$3 and phase and (717/???.ccls. or 714/???.ccls.)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/17 14:46
S43	0	(code or instruction) near3 similarit\$3 near5 (deviate or deviation or transition\$3) and (717/???.ccls. or 714/???.ccls.)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/17 14:47
S44	98	(similarit\$3 or (most\$2 near2 like\$2)) near5 (deviate or deviation or transition\$3) and (717/???.ccls. or 714/???.ccls.)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/17 14:48
S45	15	(similarit\$3 or (most\$2 near2 like\$2)) near5 (deviate or deviation or transition\$3) and (717/???.ccls. or 714/???.ccls.) and (id or identifier or signature or name)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/17 15:02

EAST Search History

S46	562	(similarit\$3 or (most\$2 near2 like\$2)) near5 (deviate or deviation or transition\$3) and (compress\$3 or consolidat\$3 or minimal or minimize)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/17 15:04
S47	1	S39 and S46	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/17 15:04
S48	54427	(similarit\$3 or (most\$2 near2 like\$2)) near5 (metric or statistic or probability or likely) and (compress\$3 or consolidat\$3 or minimal or minimize)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/17 15:05
S49	148	(similarit\$3 or (most\$2 near2 like\$2)) near5 (metric or statistic or probability) same (compress\$3 or consolidat\$3 or minimal or minimize)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/17 15:05
S50	5	(similarit\$3 or (most\$2 near2 like\$2)) near5 (metric or statistic or probability) same (compress\$3 or consolidat\$3 or minimal or minimize) and (717/???.ccls. or 714/???.ccls.)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/17 15:16
S51	0	(similarit\$3 or (most\$2 near2 like\$2)) same (confidence and variance) and (717/???.ccls. or 714/???.ccls.)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/17 15:17
S52	41	(similarit\$3 or (most\$2 near2 like\$2)) and (confidence and variance) and (717/???.ccls. or 714/???.ccls.)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/17 15:18
S53	1	(similarit\$3 or (most\$2 near2 like\$2)) and (confidence and variance) and (717/???.ccls. or 714/???.ccls.) and (goodness near2 fit)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/17 15:18
S54	4	(similarit\$3 or (most\$2 near2 like\$2)) and (confidence and variance) and (717/???.ccls. or 714/???.ccls.) and clustering	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/17 15:18

EAST Search History

S55	5	clustering and (confidence and variance) and (717/???.ccls. or 714/???.ccls.)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/17 15:20
S56	5	S53 or S54 or S55	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/17 15:19
S57	503	clustering and (confidence and variance) and similarity and (program or code)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/17 15:21
S58	3	clustering and (confidence and variance) and similarity and (program or code) and "program behavior"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/17 15:22
S59	372	clustering and (confidence and variance) and similarity and (computer near3 (program or code or software or application))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/17 15:24
S60	1	clustering same (confidence and variance) same similarity and (computer near3 (program or code or software or application))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/17 15:24
S61	68	clustering and (confidence and variance) and similarity and (computer near3 (program or code or software or application)) and ???/???.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/17 15:51
S62	2	"5699507".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/17 15:51
S63	17	("4853851" "5132972" "5291497" "5335342" "5408642" "5423027" "5440723" "5522036").PN. OR ("5699507").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/07/17 16:04
S64	12954	(mecl or edgesim or mojo)	US-PGPUB; USPAT; USOCR	OR	OFF	2006/07/17 16:04

EAST Search History

S65	12895	(mecl or edgesim)	US-PGPUB; USPAT; USOCR	OR	OFF	2006/07/17 16:05
S66	2112	(mecl or edgesim) same similar\$3	US-PGPUB; USPAT; USOCR	OR	OFF	2006/07/17 16:05
S67	7	(mecl or edgesim) same similar\$3 same cluster\$3	US-PGPUB; USPAT; USOCR	OR	OFF	2006/07/17 16:06
S68	3005	clustering same related	US-PGPUB; USPAT; USOCR	OR	OFF	2006/07/17 16:10
S69	0	S66 and S68	US-PGPUB; USPAT; USOCR	OR	OFF	2006/07/17 16:10
S70	11	S61 and S68	US-PGPUB; USPAT; USOCR	OR	OFF	2006/07/18 08:05
S71	6772	(statical\$2 or statistic\$4 or metric or metadata or analysis or analyzing) same cluster\$3 same (optimal\$2 or optimiz\$5 or optimis\$5 or minimiz\$5 or minimal\$2 or least or less or small\$3 or reduc\$4)	US-PGPUB; USPAT; USOCR	OR	OFF	2006/07/18 08:08
S72	1060	(statical\$2 or statistic\$4 or metric or metadata or analysis or analyzing) same cluster\$3 same (optimal\$2 or optimiz\$5 or optimis\$5 or minimiz\$5 or minimal\$2 or least or less or small\$3 or reduc\$4)and 7??/???. ccls.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/07/18 08:08
S73	222	(execut\$4 or run\$4 or dynamic\$4) same (statical\$2 or statistic\$4 or metric or metadata or analysis or analyzing) same cluster\$3 same (optimal\$2 or optimiz\$5 or optimis\$5 or minimiz\$5 or minimal\$2 or least or less or small\$3 or reduc\$4) and 7??/???. ccls.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/07/18 08:10

EAST Search History

S74	203	(execut\$4 or run\$4 or dynamic\$4) same (statical\$2 or statistic\$4 or metric or metadata or analysis or analyzing) same cluster\$3 same (optimal\$2 or optimiz\$5 or optimis\$5 or minimiz\$5 or minimal\$2 or least or less or small\$3 or reduc\$4) and 7??/???. ccls. and similar\$3	US-PGPUB; USPAT; USOCR	OR	OFF	2006/07/18 08:10
S75	40	(execut\$4 or run\$4 or dynamic\$4) same (statical\$2 or statistic\$4 or metric or metadata or analysis or analyzing) same cluster\$3 same (optimal\$2 or optimiz\$5 or optimis\$5 or minimiz\$5 or minimal\$2 or least or less or small\$3 or reduc\$4) and 7??/???. ccls. and similar\$3 near3 (like\$4 or distance or degree or number)	US-PGPUB; USPAT; USOCR	OR	OFF	2006/07/18 10:05
S76	1	"5953006".pn.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/07/18 10:40
S77	0	("5953006" "5574837" "5699507"). pn. and (confidence or variance)	US-PGPUB; USPAT; USOCR	OR	OFF	2006/07/18 11:04
S78	0	("5953006" "5574837" "5699507"). pn. and (simulat\$3)	US-PGPUB; USPAT; USOCR	OR	ON	2006/07/18 11:11
S79	0	("5953006" "5574837" "5699507"). pn. and ("number of instructions")	US-PGPUB; USPAT; USOCR	OR	ON	2006/07/18 11:11
S80	2	("5953006" "5574837" "5699507"). pn. and (id or identifier)	US-PGPUB; USPAT; USOCR	OR	ON	2006/07/18 11:11
S81	2	"5574837".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/01/11 10:38
S82	2	"5699507".PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/09/11 08:41

EAST Search History

S83	20	("4853851" "5132972" "5291497" "5335342" "5408642" "5423027" "5440723" "5522036").PN. OR ("5699507").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/09/11 11:21
S84	1	"5574837".pn.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/09/11 11:21
S85	13	("5440742").PN. OR ("5574837").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/09/11 12:47
S86	315	similarity.ti.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/09/11 12:47
S87	275	similarity.ti. and (time or "number of")	US-PGPUB; USPAT; USOCR	OR	OFF	2007/09/11 12:48
S88	203	similarity.ti. and (time or "number of") and (execut\$4 or runtime)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/09/11 12:50
S89	38	similarity.ti. and (time or "number of") and (execut\$4 or runtime) and interval	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/09/11 12:57
S90	120	similarity.ti. and (time\$1 or "number of" or count) and (run\$4 or execut\$4) near3 (code or instruction or software)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/09/11 14:08
S91	108	S90 not S89	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/09/11 13:00

EAST Search History

S92	10	("5067152" "5101475" "5469354" "5612865" "5794178" "5806061" "6061734" "6134532" "6349296" "6603470").PN. OR ("7158961").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/09/11 14:06
S93	8167	similar\$3 and (time\$1 or "number of" or count) near2 interval and (test\$3 or emulat\$3 or simulat\$3) near3 (code or instruction or software)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/09/11 14:09
S94	34	(analysis or compar\$4) near5 similar\$3 same (time\$1 or "number of" or count) near2 interval and (test\$3 or emulat\$3 or simulat\$3) near3 (code or instruction or software)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/09/11 14:10
S95	34	S94 not S89	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/09/11 14:14
S96	31897	(sampl\$3 near3 interval) and (similar or similarity or similarities)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/09/11 14:15
S97	6146	(sampl\$3 near3 interval) and (similar or similarity or similarities) and (simulat\$3 or emulat\$3) and (count or number or length or time or timed)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/09/11 14:17
S98	435	(sampl\$3 near3 interval) same (compar\$4 or analyz\$3 or analysis or determin\$5 or classify\$3 or identify\$3) same (similar or similarity or similarities) and (simulat\$3 or emulat\$3 or execut\$3) and (count or number or length or time or timed)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/09/11 16:20

EAST Search History

S99	105	(sampl\$3 near3 interval) same (compar\$4 or analyz\$3 or analysis or determin\$5 or classify\$3 or identify\$3) same (similar or similarity or similarities) and (simulat\$3 or emulat\$3 or execut\$3) and (count or number or length or time or timed) and (similar or similarity or similarities) near5 (function\$5 or behavior or activit\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/09/11 14:28
S100	2	"20050010902"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/09/11 14:28
S101	100	(sampl\$3 near3 interval) same (compar\$4 or analyz\$3 or analysis or determin\$5 or classify\$3 or identify\$3) same (similar or similarity or similarities) and (simulat\$3 or emulat\$3 or execut\$3) near3 (software or code or instruction) and (count or number or length or time or timed)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/09/11 16:12
S102	8	(717/???ccls. or 714/???ccls.) and (sampl\$3 near3 interval) same (compar\$4 or analyz\$3 or analysis or determin\$5 or classify\$3 or identify\$3) same (similar or similarity or similarities) and (simulat\$3 or emulat\$3 or execut\$3 or dynamic\$3 or monitor\$3 or profil\$3) and (count or number or length or time or timed)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/09/11 16:27
S103	0	(703/???ccls.) and (sampl\$3 near3 interval) same (compar\$4 or analyz\$3 or analysis or determin\$5 or classify\$3 or identify\$3) same (similar or similarity or similarities) and (simulat\$3 or emulat\$3 or execut\$3 or dynamic\$3 or monitor\$3 or profil\$3) and (count or number or length or time or timed)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/09/11 16:30

EAST Search History

S10 4	7	(cluster\$3 and constraint and weight\$3) and (sampl\$3 near3 interval) same (compar\$4 or analyz\$3 or analysis or determin\$5 or classify\$3 or identify\$3) same (similar or similarity or similarities) and (simulat\$3 or emulat\$3 or execut\$3 or dynamic\$3 or monitor\$3 or profil\$3) and (count or number or length or time or timed)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/09/11 16:35
S10 5	103	(sampl\$3 near3 interval) same (compar\$4 or analyz\$3 or analysis or determin\$5 or classify\$3 or identify\$3) near5 (similar or similarity or similarities) and (simulat\$3 or emulat\$3 or execut\$3 or dynamic\$3 or monitor\$3 or profil\$3) and (count or number or length or time or timed)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/09/11 16:42
S10 6	91	S105 not S101	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/09/11 16:36
S10 7	46	sampl\$3 near3 (interval or section or segment or portion or subsection) same (similar or similarity or similarities) and (simulat\$3 or emulat\$3 or execut\$3 or dynamic\$3 or monitor\$3 or profil\$3 or sampl\$3) and (count or number or length or time or timed) and (703/???.ccls. or 717/???.ccls. or 714/???.ccls.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/09/11 17:01
S10 8	70	(interval or section or segment or portion or subsection) and degree near3 (similar or similarity or similarities) and (simulat\$3 or emulat\$3 or execut\$3 or dynamic\$3 or monitor\$3 or profil\$3 or sampl\$3) and (count or number or length or time or timed) and (703/???.ccls. or 717/???.ccls. or 714/???.ccls.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/09/11 17:02

EAST Search History

S109	228	(interval or section or segment or portion or subsection) and (degree or amount or measur\$4) near3 (similar or similarity or similarities) and (simulat\$3 or emulat\$3 or execut\$3 or dynamic\$3 or monitor\$3 or profil\$3 or sampl\$3) and (count or number or length or time or timed) and (703/???.ccls. or 717/???.ccls. or 714/???.ccls.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/09/11 17:05
S110	0	S109 not S108 not S109 not S105	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/09/11 17:06
S111	157	S109 not S108 not S107 not S105	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/09/12 07:23
S112	103	(sampl\$3 near3 interval) same (compar\$4 or analyz\$3 or analysis or determin\$5 or classify\$3 or identify\$3) near5 (similar or similarity or similarities) and (simulat\$3 or emulat\$3 or execut\$3 or dynamic\$3 or monitor\$3 or profil\$3) and (count or number or length or time or timed)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/09/12 07:23
S113	46	sampl\$3 near3 (interval or section or segment or portion or subsection) same (similar or similarity or similarities) and (simulat\$3 or emulat\$3 or execut\$3 or dynamic\$3 or monitor\$3 or profil\$3 or sampl\$3) and (count or number or length or time or timed) and (703/???.ccls. or 717/???.ccls. or 714/???.ccls.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/09/12 07:23
S114	70	(interval or section or segment or portion or subsection) and degree near3 (similar or similarity or similarities) and (simulat\$3 or emulat\$3 or execut\$3 or dynamic\$3 or monitor\$3 or profil\$3 or sampl\$3) and (count or number or length or time or timed) and (703/???.ccls. or 717/???.ccls. or 714/???.ccls.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/09/12 07:23

EAST Search History

S11 5	228	(interval or section or segment or portion or subsection) and (degree or amount or measur\$4) near3 (similar or similarity or similarities) and (simulat\$3 or emulat\$3 or execut\$3 or dynamic\$3 or monitor\$3 or profil\$3 or sampl\$3) and (count or number or length or time or timed) and (703/???ccls. or 717/???ccls. or 714/???ccls.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/09/12 07:23
S11 6	157	S115 not S114 not S113 not S112	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/09/12 09:15
S11 7	3	"2002015135"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/09/12 09:15
S11 8	2	"20020015135"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/09/12 09:16
S11 9	1	smmt and similarity and metric	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/09/12 09:27
S12 0	27	smmt	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/09/12 11:27